(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau



14 DEC 2664 "MANDANIAN IN THE PROPERTY

(43) International Publication Date 31 December 2003 (31.12.2003)

PCT

(10) International Publication Number WO 2004/000276 A1

- (51) International Patent Classification⁷: A61K 9/14, 9/50, 9/20, 9/28, 9/16, 9/68, 47/00, A61F 13/00
- (21) International Application Number:

PCT/US2003/019006

- (22) International Filing Date: 17 June 2003 (17.06.2003)
- (25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/389,933

20 June 2002 (20.06.2002) US

- (71) Applicant (for all designated States except US): ROYER BIOMEDICAL, INC. [US/US]; 4580 F Mack Avenue, Frederick, MD 21703 (US).
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): ROYER, Garfield, P. [US/US]; 4580 F Mack Avenue, Frederick, MD 21703 (US).
- (74) Agent: DAVIDSON, Bryan, H.; Nixon & Vanderhye P.C., 1100 North Glebe Road, Suite 800, Arlington, VA 22201-4714 (US).

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: RESORBABLE MATRICES WITH COATINGS FOR DELIVERY OF BIOACTIVE COMPOUNDS

(57) <u>Abstract</u>: This invention relates to the production and use of coated inorganic-biopolymer complexes for the controlled release of bioactive compounds including medicinals. Advantageously, the delivery system compositions include an inorganic, a matrix polymer, and a coating. Advantageously, the inorganic used is calcium sulfate.